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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,758	08/19/2003	Minoru Hashimoto	SON-1748/CON	3729
23353	7590	03/09/2005	EXAMINER	
RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			PATEL, GAUTAM	
			ART UNIT	PAPER NUMBER
			2655	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/642,758	HASHIMOTO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Gautam R. Patel	2655	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 8-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/511,893.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8-19-03</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 8-19 are pending for the examination.

#### **Priority**

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the parent file.

#### **Specification**

3. The disclosure is objected for following reasons.

The title of the invention is neither precise nor descriptive. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention from the Prior Art. It is recommended that the title should reflect the gist of or the improvement of the present invention.

Correction is required.

#### **Drawings/Objection**

4. The drawings are objected for following reasons:

The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "direction of the deformation, caused by the astigmatism, of the sectional shape of laser beams", which are nearly coincident with each other must be shown or **the feature cancelled from the claim.**

#### **No new matter should be entered.**

Applicant is required to submit a proposed drawing correction in response to this Office Action. Any proposal by the applicant for amendment of the drawings to cure defects must consist of following:

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment, and may

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be *accompanied by a marked-up copy of one or more of the figures being amended, with annotations*. Any replacement drawing sheet *must be identified in the top margin as "Replacement Sheet"* and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. *Any marked-up (annotated) copy showing changes must be labeled "Annotated Marked-up Drawings" and accompany the replacement sheet in the amendment (e.g., as an appendix).*

Correction is required.

### **Claim Rejections - 35 U.S.C. § 112**

5. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8-19 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The "directions deformations of laser beams" caused by the astigmatism required by the claims is not described in the specification. On page 5, lines 1-3 the specification mentions directions of the deformations of the sectional shape of laser beams emitted from the light sources will nearly coincide with each other but does not explain what this "nearly coincident" amount is. Accordingly, the specification does not explain to one of ordinary skill in the art at the time of the invention, how to make and or use the invention comprising the claimed "nearly coincident directions of deformation", which is caused by the astigmatism.

6. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 8-19 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 8, lines 12-14 and claim 13, lines 14-16 are confusing and unclear.

It is not clear what is meant by "near", and how much is near as compared to how much is not near.

### **Claim Rejections - 35 U.S.C. § 102**

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 8-10, 12-15 and 17-19 are rejected under 35 U.S.C. § 102(e) as being anticipated by Shimano et al., US. patent 6,400,664 (hereafter Shimano).

As to claim 8, Shimano discloses the invention as claimed [see Figs. 3-4 and 20] including first and second light sources a photodetector and an astigmatism correcting means, comprising:

first [fig. 20, unit 2001] and second [fig. 20, unit 2002] light sources to emit laser beams of different wavelengths [650 and 780], respectively [col. 19, line 56 to col. 20, line 17];

a photodetector [fig. 20, unit 2010] to detect the return light from the optical recording medium [col. 19, line 56 to col. 20, line 17]; and

an optical system [fig. 20] to converge the laser beam emitted from a selected one of the first and second light sources and guide a return light from the optical recording medium [fig. 20, unit 2009] to the photodetector [col. 19, line 56 to col. 20, line 17];

the first and second light sources being disposed so that the directions deformation, caused by the astigmatism, of the sectional shape of a laser beams emitted from the light sources will nearly coincide with each other [col. 21, lines 23-48]; and

the optical system being adapted for use with the laser beams emitted from the first and second light sources, and including an astigmatism correcting means for correcting astigmatism associated with the laser beams emitted from both the first and second light sources [col. 19, line 56 to col. 20, line 17].

8. The aforementioned claim 9, recites the following elements, inter alia, disclosed in Shimano:

the astigmatism correcting means is a transparent parallel flat plate [col. 21, lines 23-48].

9. The aforementioned claim 10, recites the following elements, inter alia, disclosed in Shimano:

the first and second light sources are nearly equal in astigmatism to each other [col. 21, lines 23-48].

10. The aforementioned claim 12, recites the following elements, inter alia, disclosed in Shimano:

the laser beams from the first and second light sources are different in wavelength [650 and 780] from each other [col. 19, line 56 to col. 20, line 17].

11. The aforementioned claim 17, recites the following elements, inter alia, disclosed in Shimano:

the photodetector has a light-incident surface divided in a first direction corresponding to the scanning direction of the laser beam and in a second direction perpendicular to the first direction and thus provides results of light detection from these light-incident surface divisions [fig. 34 and col. 10, line 51 to col. 11, line 56].

12. The aforementioned claim 18, recites the following elements, inter alia, disclosed in Shimano:

the first and second light sources are deposited so that a deflection plane of the optical disc drive is parallel or perpendicular to the scanning direction of the laser beams emitted out [of] the surface of the optical disc [fig. 34 and col. 10, line 51 to col. 11, line 56].

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13. As to claims 14-15 and 19, they are claims corresponding to claims 9-10 and 12 respectively and they are therefore rejected for the same reasons set forth in the rejection of claims 9-11 and 12 respectively, supra.

### **Claim Rejections - 35 U.S.C. § 103**

14. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shimano as applied to claims 8-10, 12-15 and 17-19 above in view of Gates et al., US. patent 6,085,005 (hereafter Gates).

As to claim 11, Shimano discloses all of the above elements, including two laser light sources with different wavelengths and a photodetector. Shimano does not specifically disclose that these laser diodes and photodetectors are provided integrally in one package to the extent claimed.

However, common package housing and many parts on the same substrate are well known in the art for a long time for reduction in part more reliability.

Also Gates clearly discloses:

that it well known in the art to use several lasers photodetectors [and even mirrors] on a single platform [col. 1, lines 28-32 and col. 2, lines 7-20]; Gates].

Both Shimano and Gates are interested in providing better optical assembly both discloses several lasers and photodetectors among other related components.

One of ordinary skill in the art at the time of invention would have realized that a single platform for the components would be a desired feature to have in the system of Shimano.

Therefore, it would have been obvious to have provided a one integral package to house the lasers and photodetector in the system of Shimano as taught by Gates because one would be motivated to provide a single housing to be used for several optical components and thus reduce cost of the system and increase serviceability of the system [col. 1, lines 28-32; Gates].

#### **Other prior art cited**

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Fletcher et al. (US. Patent 3,752,559) "Ritchey-Chretien telescope".
- b. Lee et al. (US. patent 6,088,170) "Optical system ....".
- c. Shin et al. (EP 0,751,510 A2) "Optical pickup ...".
- d. Matsuoka (US. patent 5,289,313) "Optical head ....".
- e. Miyazaki (US. patent 6,181,666) "Optical pickup".
- f. Uchiyama et al. (US. patent 6,163,409) "Optical head ...".

#### **Contact Information**

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is (703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (703) 305-4827.



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Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.



**GAUTAM R. PATEL**  
**PRIMARY EXAMINER**

Gautam R. Patel  
Primary Examiner  
Group Art Unit 2655

February 18, 2005